

Appl. No.: 10/519,317
Reply to Office Action of: 04/05/2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A connection device for flex circuit, comprising a support, means for positioning said flex circuit relative to said support and conformation means for said flex circuit, characterized in that the support has a bottom at the a level of which is created an opening, said flex circuit being immobilized between said conformation means and said bottom, said conformation means having at least one bent spring strip comprising at least one bend positioned between said flex circuit and a surface so as to increase the elastic effect of said strip, wherein the connection device is adapted to removably plug the support with the flex circuit into a receiving slot of another member.
2. (Currently amended) The connection device according to claim 1, further characterized in that said means for positioning flex circuit relative to said support comprises projections downstream of the a contact zone, in the a plugging-in direction, which projections can be housed in corresponding openings created in said flex circuit.
3. (Currently amended) The connection device according to claim 2, further characterized in that said openings created in said flex circuit have an oblong form and are arranged parallel to the flex circuit conductors, at the level of the gaps, so as to perfectly immobilize the flex circuit in the a

Appl. No.: 10/519,317
Reply to Office Action of: 04/05/2006

transverse direction and permit a slight translation in the a longitudinal direction.

4. (Currently amended) The connection device according to claim 2, further characterized in that said projections are attached onto said support.

5. (Currently amended) The connection device according to claim 4, further characterized in that support comprises an opening with the contact zone, the an edge of said opening having an inclined plane downstream and said projections are attached on this plane.

6. (Currently amended) The connection device according to claim 2, further characterized in that said projections are attached onto said conformation means.

7. (Currently amended) The A connection device according to claim 6, for flex circuit, comprising a support, means for positioning said flex circuit relative to said support and conformation means for said flex circuit, characterized in that the support has a bottom at a level of which is created an opening, said flex circuit being immobilized between said conformation means and said bottom, said conformation means having at least one bent spring strip comprising at least one bend positioned between said flex circuit and a surface so as to increase elastic effect of said strip, further characterized in that said conformation means comprise a first set of bent elastic strips and a second set of strips interposed between the strips of the first set whose ends form projections that can be housed in openings of the flex circuit.

Appl. No.: 10/519,317
Reply to Office Action of: 04/05/2006

8. (Currently amended) The connection device according to claim 1, further characterized in that said means for positioning said flex circuit relative to said support comprises elements positioned upstream of a contact zone of said flex circuit.
9. (Currently amended) The connection device according to claim 8, further characterized in that said positioning means positioned upstream comprises a projection in one piece with said support that can be housed in an opening created in said flex circuit.
10. (Currently amended) The connection device according to claim 1, further characterized in that said conformation means retains and supports said flex circuit against said support and for this purpose has means for connection to said support by ratcheting.
11. (Currently amended) The connection device according to claim 1, further characterized in that it the connection device comprises means for positioning a support of another connection device to which it can be connected.
12. (Currently amended) The connection device according to claim 11, further characterized in that said support comprises complementary shapes on either side of a roughly median plane assuring the relative positioning of said two supports, the two identical supports being positioned head-to-foot.
13. (Currently amended) The connection device according to claim 12, further characterized in that said support comprises, on one side, a receptacle receiving flex circuit as

Appl. No.: 10/519,317
Reply to Office Action of: 04/05/2006

well as conformation means, and, on the other side, a housing that can receive said receptacle of a second support when said two devices are connected head-to-foot.

14. (Currently amended) The connection device according to claim 12, further characterized in that said support is presented in the form of a U whose base supports said flex circuit as well as said conformation means and whose arms have complementary shapes that can assure the relative positioning between supports.

15. (Previously presented) The connection device according to claim 12, further characterized in that the support comprises means for retaining in the connected position.

16. (Currently amended) The connection device according to claim 15, further characterized in that the support comprises a projection and a corresponding housing or opening, said projection of a first support being able to be immobilized by ratcheting in a housing or opening of a second support.

17. (Currently amended) The connection device according to claim 11, further characterized in that it the connection device comprises a separate element assuring the positioning and holding in position of said two connected supports.

18. (New) A connection device for a flex circuit, the connection device comprising:

a support;

a positioning system for positioning the flex circuit relative to the support; and

Appl. No.: 10/519,317
Reply to Office Action of: 04/05/2006

a conformer connected to the support and contacting the flex circuit,

wherein the support has a bottom with an opening, wherein the flex circuit is substantially permanently immobilized between the conformer and the bottom, wherein the conformer has at least one bent spring strip comprising at least one bend positioned between the flex circuit and a surface of the support so as to increase elastic effect of the strip, and wherein the connection device is adapted to removably plug the support with the flex circuit to another member.